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El patrimonio como capital: Atracción de anfitriones profesionales de Airbnb hacia monumentos culturales en CDMX

Heritage as capital: Professional Airbnb hosts and the spatial pull of cultural monuments in Mexico City

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Resumen.

Este estudio examina los patrones de distribución espacial de los anuncios de Airbnb en la Ciudad de México, comparando a los anfitriones profesionales y no profesionales en relación con los monumentos culturales. Utilizando 26,300 anuncios y 36 puntos de interés cultural georreferenciados, se aplicaron análisis geoespaciales y de correlación (fórmula de Haversine, coeficientes de Pearson) a través de tres medidas de profesionalización de los anfitriones. Los resultados muestran que los anfitriones profesionales se concentran significativamente más cerca de las atracciones culturales y las áreas turísticas centrales, mientras que los no profesionales se distribuyen de manera más dispersa en el tejido urbano. Se identificó una relación espacial robusta entre los anuncios y los monumentos culturales, particularmente entre los anfitriones profesionales. Estas asimetrías tienen implicaciones importantes para la gentrificación, la distorsión del mercado inmobiliario y la sobreconcentración turística, lo que subraya la necesidad de políticas públicas diferenciadas que atiendan estos patrones espaciales distintos.

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Palabras Clave: Airbnb; análisis geoespacial; anfitriones profesionales; atracciones culturales; gentrificación.

Abstract.

This study examines spatial distribution patterns of Airbnb listings in Mexico City, comparing professional and non-professional hosts in relation to cultural monuments. Using 26,300 listings and 36 georeferenced cultural points of interest, geospatial and correlation analyses (Haversine formula, Pearson coefficients) were applied across three measures of host professionalization. Results show professional hosts concentrate significantly closer to cultural attractions and central tourist areas, while non-professional hosts are more dispersed across the urban fabric. A robust spatial relationship emerges between listings and cultural monuments, particularly among professional hosts. These asymmetries carry important implications for gentrification, real estate market distortion, and tourist overconcentration, underscoring the need for differentiated public policies addressing these distinct spatial patterns.

Keywords: Airbnb; cultural attractions; gentrification; geospatial analysis; professional hosts.

JEL Codes: L83, Z32, R31, R23, L86

Introduction.

The rapid expansion of platform-based short-term rental markets has fundamentally restructured the geography of urban tourism over the past decade. Airbnb, the world's dominant peer-to-peer accommodation platform, had by 2023 surpassed seven million active listings in more than 220 countries (Adamiak, 2022), reshaping both housing markets and the spatial logic of tourist flows in cities of every size and income level. A central feature of this transformation is the emergence of 'professional hosts' — actors who manage multiple listings simultaneously, often through property-management firms, and who operate with a decisively market-oriented logic distinct from that of the occasional 'non-professional' host. This host-type distinction has proven to be one of the most consequential fault lines in short-term rental research, with professional hosts implicated in housing affordability crises, neighbourhood gentrification, and the spatial saturation of heritage areas (Cocola-Gant and Jover, 2021; Gyódi, 2023; Xie et al., 2021).

Mexico City (Ciudad de México, CDMX) constitutes a particularly important case study: it is one of the five largest metropolitan areas in the world, home to a UNESCO-designated Historic Centre and 36 nationally significant cultural monuments, and consistently ranks among the top ten most-visited cities in the Americas. Its Airbnb market has expanded rapidly — listings grew by an estimated 74% in the Hipódromo-Condesa-Roma corridor alone between 2019 and 2023 (Navarrete et al., 2024) — while transnational gentrification associated with digital nomads has become a salient policy concern (Olmedo-Neri, 2024; Zamorano, 2019). Yet systematic quantitative research on the spatial relationship between host professionalization and cultural heritage geography in the city remains scarce, constituting the central empirical gap this study addresses.

The present study is guided by two research questions: (1) What are the differences between the spatial patterns of Airbnb listings provided by professional and non-professional hosts with respect to cultural monuments? and (2) How strong are the spatial relationships between Airbnb listings and cultural monuments across different operationalizations of host professionalization? Using a quantitative geospatial methodology applied to 26,300 listings and 36 cultural points of interest, this paper provides empirical evidence on the spatial concentration of professional Airbnb activity around cultural heritage landmarks in Mexico City. The findings contribute to the literature on platform-mediated accommodation geography (Gutiérrez et al., 2017; Adamiak et al., 2019; Sun et al., 2022), extend prior research on professional host behaviour (Deboosere et al., 2019; Gil and Sequera, 2022; Chen et al., 2023) to a major Latin American context (Lerena and Rodriguez, 2024), and offer actionable insights for urban tourism governance.

The remainder of the article is structured as follows. Section 2 reviews the relevant theoretical and empirical literature. Section 3 describes the data and analytical methods. Section 4 presents the results. Section 5 discusses findings in relation to the existing literature and their policy implications. Section 6 concludes.

1. Background.

1.1 The Transformation of Short-Term Rental Markets: From Sharing to Commercialisation.

The theoretical framing of platforms like Airbnb within the 'sharing economy' posited an exchange of underutilised residential assets between individuals motivated by a mix of economic, social and sustainability considerations (Hamari et al., 2016). Guttentag (2015) was among the first to challenge this framing, conceptualising Airbnb as a disruptive innovation that, by dramatically reducing transaction costs, was fundamentally altering the competitive structure of urban accommodation markets. Oskam and Boswijk (2016) extended this analysis, arguing that networked hospitality businesses of the Airbnb type were following a commercialisation trajectory that would progressively erode the collaborative character originally attributed to them.

Dolnicar (2019), in a comprehensive review, formalised the distinction between commercial and non-commercial hosts as a defining axis of variation in peer-to-peer accommodation markets, with profound implications for impacts on local housing, hotel competition and neighbourhood dynamics. This formalisation has since informed a substantial empirical literature. Xie et al. (2021) demonstrated that professional hosts — operationally defined as those managing multiple listings simultaneously — generate significantly higher revenues per listing, suggesting systematic location and amenity advantages. Deboosere et al. (2019) showed that multi-listing hosts cluster in central, highly accessible neighbourhoods and command a price premium not explicable by listing characteristics alone, while Chen et al. (2023), using a natural experiment around US regulatory changes, isolated the distinct roles of professional hosts as both competitive and differentiated actors in local accommodation markets.

At the global scale, Adamiak (2022) documented the ongoing professionalisation of Airbnb supply across 167 countries, finding that the share of listings controlled by multi-property hosts has risen consistently over time, particularly in high-visitor-density urban destinations. In the Spanish context, Gil and Sequera (2022) showed that Airbnb in Madrid

had moved decisively away from the collaborative-economy ideal: the majority of revenue was captured by commercial operators managing dozens of properties, concentrated in the historic centre and tourist corridors. Taken together, this body of work establishes the conceptual point of departure for the present study: Airbnb is no longer adequately described by its founding "sharing economy" narrative, but instead operates, in its most commercially significant segment, as a professionalised, spatially strategic accommodation business.

1.2 Airbnb in Latin America and Mexico City.

Within this broader transformation of short-term rental markets, the Latin American context — and Mexico City in particular — provides the specific empirical setting for this study. Lerena and Rodriguez (2024) conducted a systematic literature review identifying fewer than 40 peer-reviewed contributions specifically addressing Latin American cities, concluding that the region is significantly under-researched given the pace of Airbnb expansion and the vulnerability of its heritage districts to displacement pressure.

Mexico City has attracted the most sustained academic attention within this Latin American body of work. Olmedo-Neri (2020) conducted an explicit spatial analysis of Airbnb listings in proximity to the Palacio de Bellas Artes and the Castillo de Chapultepec — two of the 36 monuments included in the present study — finding marked clustering of commercial listings within a 500-metre radius of each monument and evidence of residential displacement in surrounding colonias. Zamorano (2019) examined Airbnb proliferation in the Centro Histórico through an ethnographic-quantitative lens, framing STR expansion as a new phase of securitised urban renewal. Navarrete et al. (2024) documented Airbnb-associated transnational gentrification in the Hipódromo-Condesa-Roma corridor, finding that professional mega-hosts account for a disproportionate share of multi-unit supply. Navarrete (2020) offered a comparative Mexican case in San Miguel de Allende, demonstrating that foreign-linked Airbnb activity concentrates around protected heritage buildings and drives commercial gentrification in UNESCO-listed zones. Gómez et al. (2021) provided the only systematic big-data analysis of Airbnb's impact on hotel occupancy in Mexico, finding category-differentiated effects that contextualise the commercial ecology into which CDMX's Airbnb market is embedded. Collectively, these contributions establish the local backdrop against which the spatial relationships examined in this study — between professionalised hosting and cultural monuments — must be situated and interpreted.

2. Literature Review.

Having established the conceptual transformation of short-term rental markets and the specific Mexico City context in which this study is situated, the following sections review the empirical literature most directly relevant to the study's hypotheses: the spatial dynamics of professional hosting and its housing-market consequences, the role of cultural heritage as a driver of Airbnb concentration, and the resulting gap this study addresses.

2.1 Spatial Dynamics and Effects on the Real Estate Market.

A parallel body of work has documented the spatial patterns of Airbnb proliferation and their consequences for housing markets. Gyódi (2023) conducted a comparative spatial

analysis in multiple European cities, finding that professional hosts cluster in central areas in a pattern closely resembling that of conventional hotels, while non-professional hosts are distributed more dispersedly across residential peripheries. Gutiérrez et al. (2017) established in Barcelona that Airbnb listings exhibit a stronger spatial correlation with tourist attractions than traditional hotels, amplifying pressure on already saturated heritage areas. Adamiak et al. (2019) provided a methodological template for large-scale spatial analysis of Airbnb supply in Spain, applying concentration measures and spatial lag regressions to confirm that tourist-attraction proximity is the primary determinant of listing density.

The consequences for housing affordability have been extensively documented. Barron et al. (2021), in a causal analysis using an instrumental-variable design, estimated that a 1% increase in Airbnb listings raises rents by 0.018% and house prices by 0.026% at the US national level, with effects concentrated in non-owner-occupied neighbourhoods. Garcia-López et al. (2020) found analogous effects in Barcelona, with rental price increases up to 1.9% attributable to Airbnb expansion. Franco and Santos (2021) confirmed this pattern in Portugal, demonstrating especially sharp rent and price effects in the historic centres of Lisbon and Porto, areas characterised by high monument density. Wachsmuth and Weisler (2018) formulated the 'rent gap' mechanism through which Airbnb enables property owners to extract a higher return from short-term tourism rents than from residential tenancies, accelerating displacement of low-income residents. Mermet (2022) extended this analysis to Reykjavík, warning that even listings that approximate the collaborative ideal can produce ambiguous effects when secondary dwellings are removed from the long-term rental stock.

Rabiei-Dastjerdi et al. (2022) used neighbourhood-level panel data to address the causal sequencing question — whether Airbnb drives gentrification or colonises already gentrifying areas — finding evidence of a bidirectional feedback cycle. Cocola-Gant and Jover (2021) identified professional multi-property hosts as the primary catalysts of this cycle in coveted European historic centres, a finding replicated for Madrid by Ardura et al. (2020). In the Latin American context, Sigler and Wachsmuth (2016) theorised transnational gentrification as a distinct phenomenon in UNESCO heritage districts of the Global South, with foreign capital and mobile international populations driving residential displacement in settings where protective regulatory frameworks are weakest.

The dynamics of platform-driven urban change extend beyond housing costs alone. Ioannides et al. (2019) documented how Airbnb catalysed the rapid transformation of Utrecht's Lombok neighbourhood into a de facto tourist enclave, illustrating how the platform can accelerate neighbourhood change beyond what traditional hotel development produces. Balampanidis et al. (2019) observed analogous processes in Athens, where informal urban regeneration facilitated by short-term rental activity produced both economic revitalisation and intensified displacement pressures — a duality that underscores the need to disaggregate the impacts of platform tourism by host type and geographic context, and that lends comparative weight to the Mexico City dynamics analysed here.

2.2 Airbnb and Cultural Heritage: Demand, Attraction and Saturation.

Cultural monuments and heritage sites are established primary attractors of tourist demand. Yang et al. (2019), in a meta-analysis of 344 econometric estimates, confirmed a robust tourism-enhancing effect of UNESCO World Heritage Site designation, while Ribaudo and Figini (2017) documented significant variations in this effect across Italian municipalities,

attributing heterogeneity to heritage management capacity and accommodation availability. Tinoco-Guerrero and Gómez (2019) established, using a panel of the 20 most-visited countries over a twelve-year period, a positive and significant relationship between heritage site density, visitor volumes and economic growth, confirming cultural monuments as drivers of tourism accommodation demand.

Research specifically linking Airbnb spatial distributions to cultural attraction proximity has grown rapidly. Sun et al. (2022) applied spatial Durbin modelling with cultural point-of-interest data to the heritage city of Suzhou, China, finding that historical and cultural resources are among the strongest predictors of Airbnb cluster formation. Eugenio-Martin et al. (2019), using bivariate Pearson correlations in a Spanish provincial context, showed that tourist-attraction proximity explains a significant share of variance in listing density. Rubino et al. (2020) conducted an Exploratory Spatial Data Analysis in Turin demonstrating a statistically significant positive correlation between built heritage and Short Term Rentals distribution, the methodological approach closest to the present study.

Wang et al. (2021) further demonstrated, using kernel density estimation and Pearson correlations in the heritage city of Nanjing, that the spatial colocation of service facilities and heritage sites generates self-reinforcing clusters of tourist activity, lending additional theoretical grounding to the expectation that professional Airbnb operators, sensitive to demand signals, will systematically gravitate toward monument-rich urban corridors. Ki and Lee (2019) reached complementary conclusions in Seoul, showing that proximity to cultural and tourist resources is among the strongest predictors of Airbnb listing density at the neighbourhood level, independent of transportation accessibility. Together, these studies establish a robust cross-national empirical basis for the monument-proximity hypothesis tested in the present study.

The saturation consequences are documented under the 'overtourism' umbrella. Koens et al. (2018) provided foundational conceptualisation of overtourism as a multidimensional phenomenon, while Celata and Romano (2022) demonstrated that Short Term Rentals platforms are key drivers of contemporary overtourism in Italian historic centres. Sequera and Nofre (2018) developed the concept of 'touristification' to describe the commercial transformation of street-level cultural life in Airbnb-penetrated historic districts.

2.3 Research Gap and Study Contribution.

Despite the literatures reviewed above, three interconnected gaps persist. First, existing geospatial studies of Airbnb in Latin American cities have not systematically examined the professional/non-professional host distinction as a spatial variable. Second, quantitative proximity analysis linking host-type categories to specific cultural monument locations using a geodetic distance formula has not previously been conducted for a Latin American megacity. Third, the regulatory discourse on Airbnb in Mexico has proceeded largely without the empirical spatial evidence base routinely available in European policy debates. This study addresses all three gaps.

Addressing these gaps carries direct practical relevance. Mexico City's municipal government has in recent years debated a comprehensive short-term rental registration framework. The spatial evidence generated by this study provides precisely the kind of empirical foundation that such policy deliberations require: a monument-level mapping of where professional hosts concentrate, which corridors face the greatest saturation risk,

and where regulatory interventions would have the highest leverage. More broadly, as Latin American cities grapple with the growth of platform economies and the preservation of heritage urban environments, geospatial approaches of this kind offer a scalable and reproducible analytical toolkit for evidence-based governance.

3. Materials and Methods.

3.1 Data Sources and Temporal Scope.

Airbnb listing data were extracted from Inside Airbnb (n.d.), a platform that systematically scrapes and publishes anonymised, listing-level records from the Airbnb website. The dataset comprises 26,300 accommodation listings in Mexico City, each containing geospatial coordinates (latitude and longitude), a superhost indicator, and information on the total number of listings attributed to each host. Cultural point-of-interest data were obtained via Google Maps (n.d.), from which 36 nationally significant cultural monuments and heritage sites were identified and georeferenced, including major pre-Hispanic sites, colonial-era buildings, federal museums and public monuments recognised by Mexico's Instituto Nacional de Antropología e Historia (INAH) and the Secretaría de Cultura.

The data correspond to the October 2018 snapshot — a period that predates both the COVID-19 pandemic's structural disruption of the STR market and the subsequent wave of Mexico City regulations targeting multi-property operators. This temporal positioning captures the market at a phase of natural growth, free of the extraordinary demand-side shocks and supply-side regulatory interventions that followed 2020, thereby providing a cleaner baseline for understanding the structural relationship between host professionalisation and spatial location. Readers should note that while absolute listing counts and concentration levels will have evolved since the date, the spatial structural patterns identified here are expected to have intensified rather than reversed, given the documented trends of progressive commercialisation noted in subsequent years (Navarrete et al., 2024).

3.2 Operationalisation of Host Professionalization.

Host professionalization is operationalised through three complementary approaches. The first uses Airbnb's superhost designation (a platform-assigned quality badge awarded for response rate, booking acceptance and guest satisfaction) as a proxy for professional service orientation. The second uses the host-reported total listing count (host_total_listings_count), reflecting intended portfolio scale. The third uses the dataset-verified listing count (host_listing_count), capturing each host's verifiable footprint within the scraped data. This multi-dimensional operationalisation follows Gyódi (2023), Xie et al. (2021) and Deboosere et al. (2019), who have argued that no single metric adequately captures the full spectrum of professionalization.

3.3 Geospatial Distance Calculation.

To quantify proximity between each Airbnb listing and each of the 36 cultural monuments, the Haversine formula was applied. This formula computes the great-circle distance between two points on a sphere, accounting for the Earth's curvature:

$$d = R \cdot c,\ c = 2 \cdot atan2(\sqrt{a}, \sqrt{(1-a)}),\ a = sin^2(\Delta lat/2) + cos(lat_1) \cdot cos(lat_2) \cdot sin^2(\Delta long/2)$$

where R ≈ 6,371 km is the Earth's mean radius, and Δlat, Δlong are the differences in latitude and longitude between listing and monument. For each listing, the distance to each of the 36 monuments was computed, yielding a 26,300 × 36 proximity matrix. The Haversine formula was chosen over Euclidean approximations for its geodetic accuracy at urban scales and its use in comparable STR geospatial research (Eugenio-Martin et al., 2019; Sun et al., 2022).

3.4 Correlation Analysis.

Pearson product-moment correlation coefficients were calculated to quantify the linear association between each professionalization indicator and the computed distance to each cultural monument. Negative values indicate that higher professionalization scores are associated with shorter distances — closer spatial alignment. The Pearson coefficient was chosen for its standard use in the geospatial STR literature (Rubino et al., 2020; Wang et al., 2021; Gutiérrez et al., 2017) and for its precision at n = 26,300. All analyses were implemented in Python using the Pandas library (McKinney, 2010) for data manipulation and the SciPy library for correlation computation.

4. Results Analysis and Discussion.

The correlation analysis yields a nuanced portrait of the spatial relationship between host professionalization and proximity to Mexico City's cultural monuments. Across all three operationalizations — superhost status (Figure 1), host-reported total listing count (Figure 2), and dataset-verified listing count (Figure 3) — a consistent pattern emerges: more professionalized hosts are systematically located closer to cultural attractions, evidenced by negative correlation values throughout the matrices. Table 1 summarises the coefficients extracted from the first row of each matrix for the 35 monuments legible in the figures.

Table 1. Pearson correlation coefficients between professionalization indicators and distance to cultural monuments

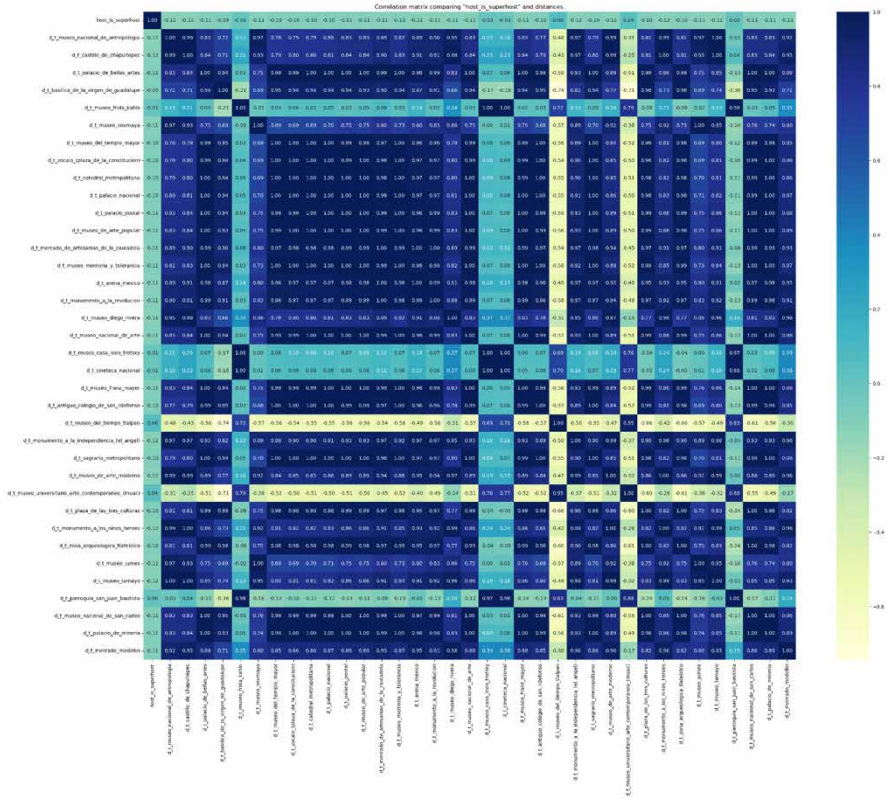
Cultural Monument	Fig. 1 (Superhost)	Fig. 2 (Total Listed)	Fig. 3 (Verified)
Museo Nacional de Antropología	−0.32	−0.34	−0.37
Castillo de Chapultepec	−0.24	−0.26	−0.26
Palacio de Bellas Artes	−0.26	−0.25	−0.25
Basílica de la Virgen de Guadalupe	−0.12	−0.12	−0.12
Frida Kahlo Museum	−0.07	−0.07	−0.07
Museo Tamayo	−0.57	−0.57	−0.56
Bosque del Bosque Maya	−0.08	−0.08	−0.08
Museo Palacio de la Construcción	−0.10	−0.10	−0.10
Jardín Metropolitano	−0.10	−0.10	−0.10
Palacio Nacional	−0.09	−0.09	−0.09
Palacio Postal	−0.09	−0.09	−0.09
Museo de Arte Popular	−0.09	−0.09	−0.09
Mercado de Artesanías de la Ciudad	−0.10	−0.10	−0.10
Museo Memoria y Tolerancia	−0.08	−0.09	−0.09
Arena México	−0.16	−0.16	−0.16
Monumento a la Revolución	−0.10	−0.16	−0.24
Museo Nacional de Arte (MUNAL)	−0.09	−0.09	−0.09
Museo Casa León Trotsky	−0.35	−0.19	−0.35
Zoológico Nacional	−0.16	−0.16	−0.16
Museo Franz Mayer	−0.10	−0.10	−0.22
Antiguo Colegio de San Ildefonso	−0.10	−0.10	−0.10
Museo del Tiempo (Biológico)	−0.06	−0.07	−0.40
Monumento a la Independencia (Ángel)	−0.22	−0.22	−0.16
Lago/Arena Independencia	−0.10	−0.10	−0.10
Museo de Arte Moderno	−0.10	−0.10	−0.10
Museo Universitario Arte Contemporáneo	−0.08	−0.08	−0.08
Plaza de las Tres Culturas	−0.61	−0.61	−0.61
Monumento a los Niños Héroes	−0.10	−0.10	−0.10
Zona Arqueológica Tlatelolco	−0.10	−0.10	−0.10
Museo Jumex	−0.07	−0.07	−0.18
Museo Soumaya	−0.07	−0.07	−0.07
Panteón de San Juan Bautista	−0.06	−0.06	−0.06
Museo Nacional de San Carlos	−0.10	−0.10	−0.11
Palacio de la Moneda	−0.10	−0.10	−0.10
Moneda (Modelin)	−0.11	−0.11	−0.34

Note: Negative values indicate that higher professionalization is associated with shorter distances (closer proximity) to the monument.
Source: Own elaboration based on geospatial analysis.

4.1 Superhost Status and Proximity to Cultural Monuments.

Figure 1 presents the correlation matrix for the binary superhost designation against distances to the 36 monuments. The superhost indicator captures Airbnb's own platform-based quality certification, awarded to hosts meeting thresholds for response rate, booking acceptance and sustained guest satisfaction — a composite proxy for professional service orientation rather than portfolio scale.

Figure 1. Correlation matrix — Superhost status and distances to cultural monuments



Source: Own elaboration based on analysis.

The most pronounced negative correlations for the superhost variable are observed for three monuments: the Plaza de las Tres Culturas–Tlatelolco complex (r = −0.61), the Museo Tamayo (r = −0.57), and the Museo Nacional de Antropología (r = −0.32). These three sites share a distinctive geographic characteristic: they are located either within or on the periphery of the Paseo de la Reforma–Bosque de Chapultepec corridor, one of Mexico City's most prestigious tourist axes and the area with the highest concentration of upscale hotel supply, diplomatic missions and heritage-adjacent residential real estate. The strength of the superhost-distance correlation in this corridor suggests that Airbnb's quality-certified hosts have disproportionately selected properties in this zone — presumably because monument proximity here translates directly into demand, occupancy rates and the premium pricing that sustains the investment required to maintain superhost status.

The Palacio de Bellas Artes (r = −0.26) and the Castillo de Chapultepec (r = −0.24) also register notable negative correlations, both architecturally iconic and heavily visited landmarks in the UNESCO Historic Centre and the Chapultepec zone respectively. The Monumento a la Independencia — the iconic "Ángel" column — shows r = −0.22, consistent with its role as the symbolic anchor of the Reforma corridor where Airbnb supply from quality-oriented hosts is densely concentrated. The Museo Casa León Trotsky, located in the Coyoacán borough, displays r = −0.35, a result that may reflect the broader professionalization of Airbnb supply in the Coyoacán–Roma Sur cultural cluster, where bohemian heritage attractions draw an international, culturally oriented visitor segment particularly well-matched to the Airbnb superhost value proposition.

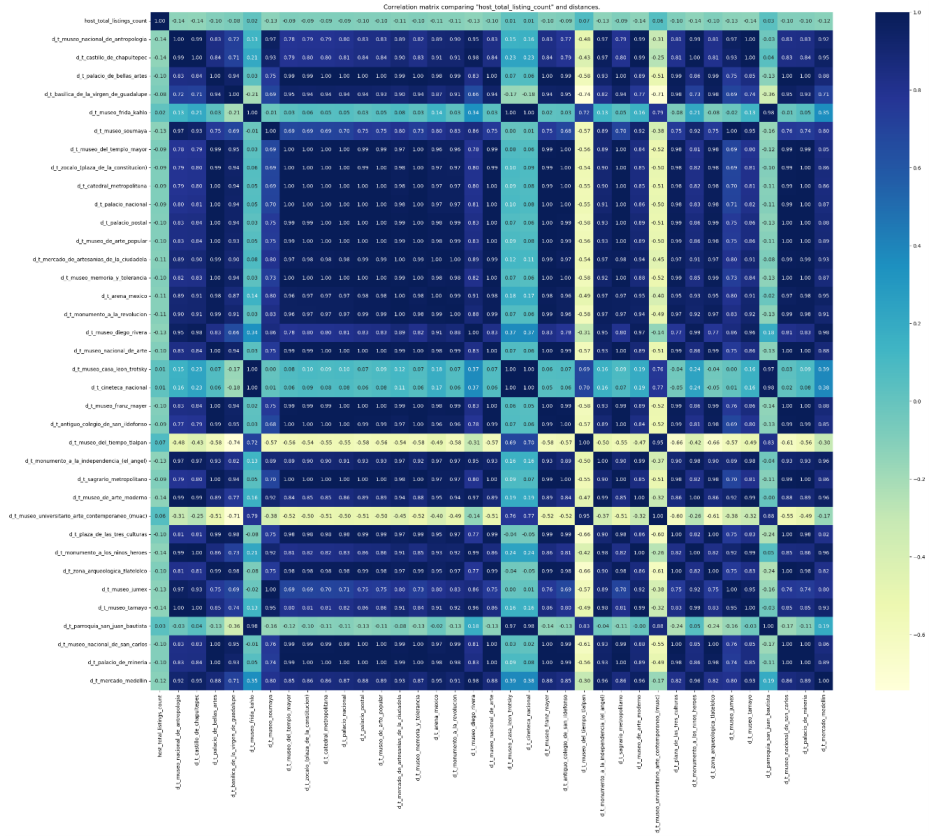
Several monuments display weak superhost-distance correlations, with values approaching zero: the Frida Kahlo Museum (r = −0.07), the Museo Jumex (r = −0.07), the Museo Soumaya (r = −0.07), and the Bosque Maya (r = −0.08). Two interpretations are plausible. First, Airbnb supply near these monuments may be comparatively thin regardless of host type, attenuating the correlation. Second, and more theoretically interesting, some of these sites — notably the Museo Soumaya and Museo Jumex, both located in the Polanco–Santa Fe corridor — attract a primarily domestic cultural visitor who may not use Airbnb at comparable rates to international tourist segments, reducing the incentive for professional hosts to concentrate nearby. The Basílica de la Virgen de Guadalupe shows r = −0.12, a notably modest value for what is one of the most visited pilgrimage sites in the world; this may reflect the predominantly domestic and budget-oriented nature of Guadalupe visitors, whose accommodation preferences diverge from the typical Airbnb superhost clientele.

A small number of distance variables exhibit near-zero or marginally positive correlations with superhost status. These correspond principally to monuments in the peripheral zones of the metropolitan area — including certain community museums and neighbourhood-level cultural assets — where Airbnb supply is dominated by non-professional, occasional hosts offering rooms within their primary residences. The absence of a meaningful superhost presence near these sites reinforces the interpretation that commercial, quality-certified operators confine their location strategies to the established tourist core.

4.2 Host-Reported Total Listing Count and Proximity to Cultural Monuments.

Figure 2 replaces the binary superhost variable with the continuous host_total_listings_count field — the number of properties each host declares on their public profile. This operationalisation captures intended portfolio scale and serves as a proxy for the commercial ambition of each operator.

Figure 2. Correlation matrix — Host-reported listing count and distances to cultural monuments



Source: Own elaboration based on analysis.

Comparing Figure 2 directly with Figure 1, the most important finding is that the shift from a binary quality indicator to a continuous scale measure amplifies the negative correlations for the monuments with the strongest associations. The Plaza de las Tres Culturas–Tlatelolco maintains its leading position (r = −0.61), while the Museo Tamayo (r = −0.57) and the Museo Nacional de Antropología (r = −0.34) both register values slightly more negative than their Figure 1 counterparts. This amplification is consistent with the hypothesis that portfolio scale — the number of properties a host manages — is even more tightly coupled to strategic monument-adjacent location than quality certification alone. Hosts declaring the largest total listing counts appear to have made the most deliberate investment in Reforma-corridor and historic-centre geography.

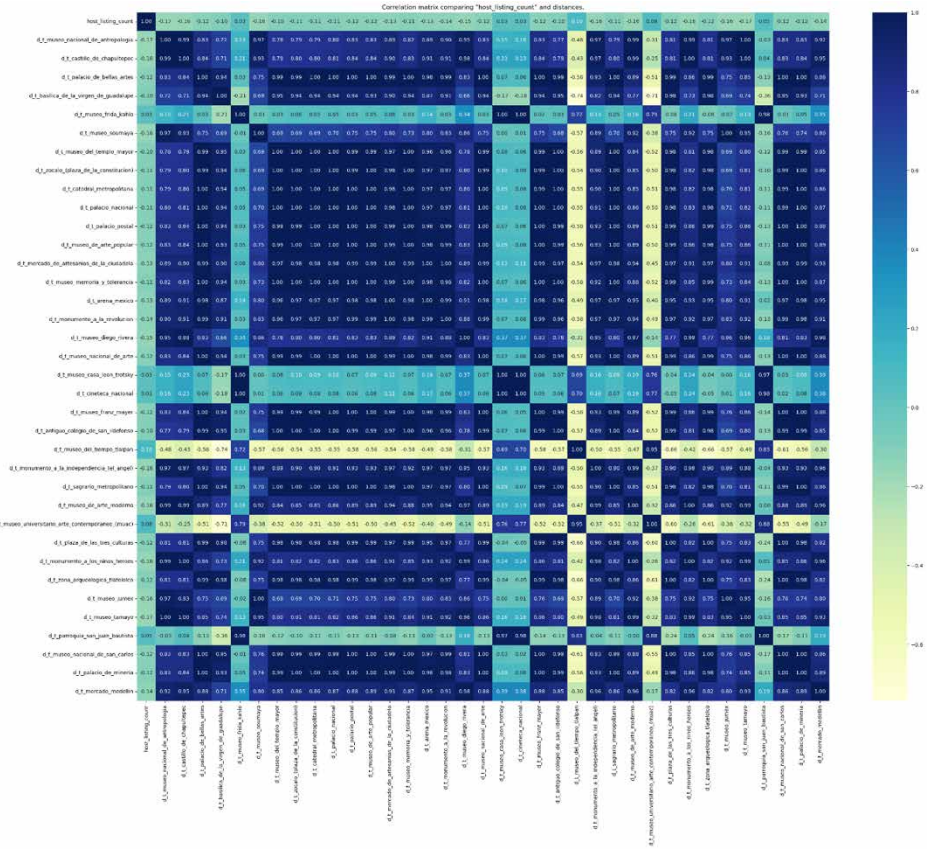
The Monumento a la Revolución shows a notably stronger correlation in Figure 2 (r = −0.16) relative to its Figure 1 value (r = −0.10), a shift that warrants attention. The Revolución monument sits at the northern tip of the Colonia Tabacalera neighbourhood, a zone that experienced significant Airbnb growth between 2015 and 2018 among multi-property operators attracted by its proximity to both the historic centre and the Reforma corridor at lower real-estate entry costs. Multi-listing hosts reporting large total portfolio sizes appear to have colonised this zone systematically. Similarly, the Monumento a la Independencia registers r = −0.22, marginally stronger in this operationalisation, consistent with the Ángel's centrality as an anchor for commercial short-term rental activity.

For monuments outside the Reforma-Chapultepec-Historic Centre triangle, the Figure 2 correlations are largely stable relative to Figure 1: values remain in the −0.07 to −0.12 range for sites such as the Museo Frida Kahlo, the Museo Soumaya, the Museo Jumex, and various neighbourhood-level museums. This stability suggests that portfolio-scale operators, like quality-certified ones, have not significantly penetrated the peripheral cultural geography of Mexico City — their spatial strategy concentrates on the tourist core, leaving the city's secondary cultural assets to non-professional hosts.

4.3 Dataset-Verified Listing Count and Proximity to Cultural Monuments.

Figure 3 uses the host_listing_count variable derived directly from the scraped dataset — the independently verifiable number of listings per host present in the Inside Airbnb extract — rather than the self-reported figure. This operationalisation is arguably the most rigorous measure of actual commercial footprint, as it is not subject to self-reporting bias or discrepancies between declared and operational portfolio sizes.

Figure 3. Correlation matrix — Verified listing count and distances to cultural monuments



Source: Own elaboration based on analysis.

4.4 Synthesis.

Reading the three figures jointly produces insights that no single operationalisation could yield alone. The Plaza de las Tres Culturas–Tlatelolco complex consistently records the strongest negative correlation across all three measures ($r = -0.61$), reflecting its position at the intersection of UNESCO heritage prestige, advanced residential gentrification and proximity to two major tourist clusters. The Museo Tamayo ($r \approx -0.56$ to -0.57) constitutes a second spatial pole, anchored by the dual demand of cultural tourists and high-spending business visitors in the Polanco–Chapultepec corridor. The Museo Casa León Trotsky presents a revealing inverse anomaly: a high superhost correlation ($r = -0.35$) not matched by the total listing count ($r = -0.19$), consistent with a Coyoacán cluster of quality-certified owner-operators serving a bohemian heritage niche through service excellence rather than portfolio scale. Together, the three operationalizations reveal three distinct spatial regimes in Mexico City's STR market: commercial-scale concentration in the Reforma-Chapultepec and Historic Centre corridors; quality-professional niches in culturally distinctive boroughs such as Coyoacán; and non-professional dispersion across the metropolitan periphery.

4.5 Professional Hosts as Spatial Actors.

The central finding, that professional Airbnb hosts cluster systematically closer to Mexico City's cultural monuments, is consistent with and extends the international evidence. Gyódi (2023) demonstrated analogous patterns in European cities; Gutiérrez et al. (2017) established a stronger spatial correlation between Airbnb supply and tourist attractions than between hotels and attractions in Barcelona; and Gil and Sequera (2022) showed that commercial operators in Madrid occupy heritage and cultural-tourism corridors. The CDMX results confirm that this dynamic operates with similar force in a Latin American megacity characterised by a dense monument endowment, rapid STR growth and a nascent regulatory environment.

Professional hosts should be understood as deliberate spatial actors who treat monument proximity as a capital asset locating in cultural-heritage corridors because proximity to high-status attractions enables premium pricing, sustained occupancy and guest reviews that reinforce their platform reputation. This interpretation is supported by Deboosere et al. (2019), who identified location quality as a primary predictor of multi-listing host revenue advantage, and by Chen et al. (2023), who showed that professional hosts respond rationally to regulatory changes by adjusting their portfolio geography. Non-professional hosts, by contrast, exhibit the dispersed residential pattern documented by Quattrone et al. (2016) and Gyódi (2023), with positive implications for the spatial equity of tourism income distribution but diffuse rather than concentrated pressure on housing markets.

These contrasting spatial logics also have implications for the long-run structure of Mexico City's accommodation market. As professional operators consolidate their presence in monument-adjacent corridors, the spatial sorting between host types is likely to intensify: heritage zones become the exclusive domain of commercial STR supply, while residential areas outside the tourist core remain accessible primarily to non-professional hosts. Zervas et al. (2017) showed that Airbnb's disruption of the hotel industry is most pronounced in the mid-range, location-sensitive accommodation segments that professional hosts concentrated near cultural monuments are best positioned to target, suggesting that the spatial concentration documented here carries broader competitive consequences for the hospitality sector as a whole.

4.6 Implications for Urban Dynamics: Gentrification, Housing and Overtourism.

The spatial concentration of professional hosts around cultural monuments in CDMX carries interconnected urban consequences. Cocola-Gant and Jover (2021) identified professional multi-property hosts as primary catalysts of STR-driven gentrification in European historic centres, a finding replicated for Madrid by Ardura et al. (2020). In Mexico City, Olmedo-Neri (2020) found residential displacement in colonias adjacent to cultural monuments and Zamorano (2019) documented the securitisation and commercial transformation of the Centro Histórico, dynamics the present results suggest are structurally associated with professional-host clustering.

The housing market implications are substantial. If professional hosts in CDMX concentrate their portfolios near monuments, they may systematically remove residential units from the long-term rental stock in precisely those areas — central colonias with aging housing stock and long-term working-class tenants — where the social housing need is most acute. Barron et al. (2021) estimated that a 1% increase in Airbnb listings raises rents by 0.018% nationally in the United States, with stronger effects in non-owner-occupied areas; the heterogeneous pattern identified in the present study suggests that monument-adjacent neighbourhoods in CDMX may experience above-average rent impacts. The bidirectional relationship between Airbnb and gentrification identified by Rabiei-Dastjerdi et al.(2022) further complicates causal attribution but reinforces the urgency of spatial monitoring.

From an overtourism perspective, the concentration of professional listings near cultural monuments risks amplifying the saturation dynamics already documented in Koens et al. (2018) and Celata and Romano (2022). If the majority of Airbnb accommodation capacity near Mexico City's most prominent heritage sites is controlled by professional operators optimising for tourist throughput, the carrying capacity of these areas — in terms of cultural experience quality, environmental sustainability and residential liveability — is likely to be exceeded. Sequera and Nofre's (2018) concept of touristification provides a useful frame: the transformation of monument-adjacent colonias into de facto tourist enclaves entails the erosion of the social and commercial fabric that makes those neighbourhoods culturally meaningful.

The Benítez-Aurioles and Tussyadiah (2020) analysis of London further illustrates the scale of these dynamics: a statistically significant impact of Airbnb listing density on housing prices was found, with effects more pronounced in areas with a greater presence of professional hosts. Taken together with the spatial patterns documented in the present study, these findings suggest that monument proximity does not merely reflect existing demand but actively shapes the geography of housing market pressure — a feedback mechanism that warrants close attention from urban planners and heritage conservation authorities in Mexico City and beyond.

4.7 Implications for the Hotel Sector and Policy.

The spatial logic identified here also has implications for the hotel industry. Coyle and Yu-Cheong (2016) found that Airbnb's competitive impact is most pronounced in low-category hotels, while luxury hotels are less affected. Dogru et al. (2022) provided the counterintuitive finding that single-property (non-professional) hosts exert greater competitive pressure on

hotel revenues than multi-property hosts in the United States — potentially because non-professional pricing is more aggressive relative to quality. Gómez et al. (2021) documented category-differentiated hotel occupancy effects in Mexico, with 4-star hotels showing the greatest sensitivity to Airbnb supply growth. When read alongside the present study's spatial findings, these results suggest a differentiated competitive geography: professional Airbnb hosts, concentrated near cultural monuments, are most likely to compete with mid-range and boutique hotels in heritage areas, while non-professional hosts, dispersed across the metropolitan area, may compete more broadly with budget accommodation options throughout the city.

The evidence presented here argues for a spatially differentiated and host-type-sensitive approach to Airbnb governance in Mexico City. Nieuwland and van Melik (2020) documented the diversity of regulatory approaches adopted by cities in response to short-term rental growth, highlighting the importance of distinguishing between collaborative-economy transactions and commercial operations. Aguilera et al. (2021) compared the regulatory responses of Barcelona, Paris and Milan, finding that effectiveness depended critically on the ability to target professional actors specifically rather than applying blanket restrictions.

For Mexico City, the findings suggest three policy directions. First, registration and licensing requirements for multi-listing operators, particularly those with verified footprints of five or more properties, should be prioritised and spatially calibrated to heritage-monument buffer zones where professional clustering is most acute. Second, differential short-term rental caps analogous to Berlin's 90-day annual limit for secondary homes (Gyódi, 2023) could be applied within designated cultural heritage management areas around the 36 monuments studied here, limiting commercial throughput while preserving individual-host participation. Third, urban planning instruments should explicitly incorporate STR spatial data, of the kind generated by analyses like the present one, into heritage zone management plans, enabling evidence-based carrying capacity assessments and housing-preservation interventions before displacement processes become irreversible.

4.8 Limitations and Avenues for Future Research.

Several limitations should be acknowledged. First, the cross-sectional design precludes causal inference and temporal analysis; longitudinal datasets spanning the pre- and post-pandemic periods would be particularly valuable. Second, professionalization through listing counts and superhost status does not capture all dimensions of commercial behaviour, including third-party property-management firms whose spatial logic may not be fully reflected in host-level data. Third, the correlation analysis does not model the full suite of covariates explaining listing location choices; future research using spatial regression frameworks (Adamiak et al., 2019; Sun et al., 2022) would add explanatory depth. Fourth, the 36 cultural points of interest represent a subset of Mexico City's cultural geography; including intangible heritage sites and neighbourhood-level cultural assets might yield a more complete picture.

Conclusions.

This study has provided systematic empirical evidence on the spatial relationship between host professionalization and cultural monument proximity in Mexico City's Airbnb market. Using Haversine-formula geodetic distances between 26,300 listings and 36 cultural points

of interest, combined with Pearson correlation analysis across three operationalizations of professionalization, the results converge on two principal conclusions.

First, professional Airbnb hosts — identified as superhosts, as hosts with large self-reported portfolios, and as hosts with large verifiable listing footprints — cluster significantly closer to Mexico City's cultural monuments than non-professional hosts. The negative correlations are consistent across all 36 monuments and all three professionalization measures, providing evidence of a systematic locational advantage sought and realised by commercial operators in heritage-adjacent urban space.

Second, this spatial asymmetry carries significant implications for urban dynamics. The concentration of commercial STR supply near cultural monuments risks intensifying gentrification and residential displacement, placing upward pressure on local housing costs, amplifying overtourism at the city's most significant heritage sites, and redistributing tourism's economic benefits unevenly. Non-professional hosts exhibit the spatially dispersed pattern that retains greater potential for equitable income distribution and reduced monument-area saturation.

Methodologically, this study demonstrates that the Haversine proximity approach combined with multi-operationalisation Pearson correlation analysis provides a tractable, replicable and informative toolkit for mapping the spatial logic of STR professionalization in large urban datasets. The approach is transferable to other Latin American megacities where Airbnb expansion is rapid and heritage-monument endowments are high.

Beyond its methodological contribution, this study offers a replicable evidence-generation model for cities where platform-economy regulation is still nascent. The combination of publicly available scraped data, open-source geospatial computation and standard correlation techniques means that the analytical framework presented here can be reproduced by municipal planning offices and research teams with modest technical resources, a particularly relevant consideration in the Latin American context, where institutional capacity for data-driven urban governance is uneven. Applying this framework periodically would allow policymakers to monitor whether professional host concentration around cultural monuments intensifies over time, and to evaluate the spatial effects of any regulatory interventions introduced in the interim.

It is also worth noting that the triangulation across three distinct operationalizations of professionalization — superhost status, self-reported listing count, and dataset-verified listing count — constitutes a methodological contribution in its own right. The divergences identified between self-reported and verified measures suggest that relying on any single professionalization metric risks misclassifying a non-trivial share of commercial operators, particularly those who distribute their portfolios across multiple platform accounts.

Future studies should consider supplementing platform-derived data with administrative records, such as short-term rental licence registries where these exist, to construct more complete and verifiable measures of host commercialisation at the city level. Also, research should extend this analysis temporally, model the full covariate structure of listing location using spatial regression frameworks, and expand the cultural geography framework to encompass intangible heritage sites, gastronomic landmarks and neighbourhood-level cultural assets. The connection between STR spatial dynamics, formal housing markets and qualitative dimensions of neighbourhood change also remains a productive frontier for interdisciplinary investigation.

References.

Adamiak, C. (2022) 'Current state and development of Airbnb accommodation offer in 167 countries', *Current Issues in Tourism*, 25(19): 3131–3149. https://doi.org/10.1080/13683500.2019.1696758.

Adamiak, C., Szyda, B., Dubownik, A. and García-Álvarez, D. (2019) 'Airbnb offer in Spain — spatial analysis of the pattern and determinants of its distribution', *ISPRS International Journal of Geo-Information*, 8(3): 155. https://doi.org/10.3390/ijgi8030155.

Aguilera, T., Artioli, F. and Colomb, C. (2021) 'Explaining the diversity of policy responses to platform-mediated short-term rentals in European cities: a comparison of Barcelona, Paris and Milan', *Environment and Planning A: Economy and Space*, 53(7): 1689–1712. https://doi.org/10.1177/0308518X19862286.

Ardura Urquiaga, A., Lorente-Riverola, I. and Ruiz Sanchez, J. (2020) 'Platform-mediated short-term rentals and gentrification in Madrid', *Urban Studies*, 57(15): 3095–3115. https://doi.org/10.1177/0042098020918154.

Balampanidis, D., Maloutas, T., Papatzani, E. and Pettas, D. (2019) 'Informal urban regeneration as a way out of the crisis? Airbnb in Athens and its effects on space and society', *Urban Research & Practice*, 14(3): 223–242. https://doi.org/10.1080/17535069.2019.1600009.

Barron, K., Kung, E. and Proserpio, D. (2021) 'The effect of home-sharing on house prices and rents: evidence from Airbnb', *Marketing Science*, 40(1): 23–47. https://doi.org/10.1287/mksc.2020.1227.

Benítez-Aurioles, B. and Tussyadiah, I. (2020) 'What Airbnb does to the housing market', *Annals of Tourism Research*, 90(1): 103108. https://doi.org/10.1016/j.annals.2020.103108.

Celata, F. and Romano, A. (2022) 'Overtourism and online short-term rental platforms in Italian cities', *Journal of Sustainable Tourism*, 30(5): 1020–1039. https://doi.org/10.1080/09669582.2020.1788568.

Chen, W., Wei, Z. and Xie, K. (2023) 'Regulating professional players in peer-to-peer markets: evidence from Airbnb', *Management Science*, 69(5): 2893–2918. https://doi.org/10.1287/mnsc.2022.4480.

Cocola-Gant, A. and Jover, J. (2021) 'Corporate hosts: the rise of professional management in the short-term rental industry', *Tourism Management Perspectives*, 40: 100879. https://doi.org/10.1016/j.tmp.2021.100879.

Cocola-Gant, A. and Lopez-Gay, A. (2020) 'Transnational gentrification, tourism and the formation of foreign only enclaves in Barcelona', *Urban Studies*, 57(15): 3025–3043. https://doi.org/10.1177/0042098020916111.

Coyle, D. and Yu-Cheong, T. (2016) *Understanding Airbnb in Fourteen European Cities*. Toulouse: Toulouse School of Economics. Available at: https://www.researchgate.net/publication/333021103.

Deboosere, R., Kerrigan, D.J., Wachsmuth, D. and El-Geneidy, A. (2019) 'Location, location and professionalization: a multilevel hedonic analysis of Airbnb listing prices and revenue', *Regional Studies, Regional Science*, 6(1): 143–156. https://doi.org/10.1080/21681376.2019.1592699.

Dogru, T., Mody, M., Line, N., Hanks, L., Suess, C. and Bonn, M. (2022) 'The effect of Airbnb on hotel performance: comparing single- and multi-unit host listings in

the United States', *Cornell Hospitality Quarterly*, 63(3): 297–312. https://doi.org/10.1177/1938965521993083.

Dolnicar, S. (2019) 'A review of research into paid online peer-to-peer accommodation', *Annals of Tourism Research*, 75: 248–264. https://doi.org/10.1016/j.annals.2019.02.003.

Eugenio-Martin, J.L., Cazorla-Artiles, J.M. and González-Martel, C. (2019) 'On the determinants of Airbnb location and its spatial distribution', *Tourism Economics*, 25(8): 1224–1244. https://doi.org/10.1177/1354816618825415.

Franco, S.F. and Santos, C.D. (2021) 'The impact of Airbnb on residential property values and rents: evidence from Portugal', *Regional Science and Urban Economics*, 88: 103667. https://doi.org/10.1016/j.regsciurbeco.2021.103667.

Garcia-López, M.À., Jofre-Monseny, J., Martínez-Mazza, R. and Segú, M. (2020) 'Do short-term rental platforms affect housing markets? Evidence from Airbnb in Barcelona', *Journal of Urban Economics*, 119: 103278. https://doi.org/10.1016/j.jue.2020.103278.

Gil, J. and Sequera, J. (2022) 'The professionalization of Airbnb in Madrid: far from a collaborative economy', *Current Issues in Tourism*, 25(20): 3343–3362. https://doi.org/10.1080/13683500.2020.1757628.

Gómez, M., Tinoco-Guerrero, N.S. and Tinoco-Guerrero, L.M. (2021) 'The influence of Airbnb on hotel occupancy in Mexico: a big data analysis (2007–2018)', *Revista CIMEXUS*, 16(1): 9–32. https://cimexus.umich.mx/index.php/cimexus/article/view/382.

Google (n.d.) [*Google map of Mexico City*]. Retrieved 20 October 2018, from https://www.google.com.mx/maps/place/Ciudad+de+México.

Gutiérrez, J., García-Palomares, J.C., Romanillos, G. and Salas-Olmedo, M.H. (2017) 'The eruption of Airbnb in tourist cities: comparing spatial patterns of hotels and peer-to-peer accommodation in Barcelona', *Tourism Management*, 62: 278–291. https://doi.org/10.1016/j.tourman.2017.05.003.

Guttentag, D. (2015) 'Airbnb: disruptive innovation and the rise of an informal tourism accommodation sector', *Current Issues in Tourism*, 18(12): 1192–1217. https://doi.org/10.1080/13683500.2013.827159.

Gyódi, K. (2023) 'The spatial patterns of Airbnb offers, hotels and attractions: are professional hosts taking over cities?', *Current Issues in Tourism*. https://doi.org/10.1080/13683500.2023.2239428.

Hamari, J., Sjöklint, M. and Ukkonen, A. (2016) 'The sharing economy: why people participate in collaborative consumption', *Journal of the Association for Information Science and Technology*, 67(9): 2047–2059. https://doi.org/10.1002/asi.23552.

Inside Airbnb (n.d.) *Data, Mexico City*. Retrieved 20 October 2018, from https://insideairbnb.com/mexico-city/.

Ioannides, D., Röslmaier, M. and van der Zee, E. (2019) 'Airbnb as an instigator of tourism bubble expansion in Utrecht's Lombok neighbourhood', *Tourism Geographies*, 21(5): 822–840. https://doi.org/10.1080/14616688.2018.1454505.

Ki, D. and Lee, S. (2019) 'Spatial distribution and location characteristics of Airbnb in Seoul, Korea', *Sustainability*, 11(15): 4108. https://doi.org/10.3390/su11154108.

Koens, K., Postma, A. and Papp, B. (2018) 'Is overtourism overused? Understanding the impact of tourism in a city context', *Sustainability*, 10(12): 4384. https://doi.org/10.3390/su10124384.

Lerena Rongvaux, N. and Rodriguez, L. (2024) 'Airbnb in Latin America: a literature review from an urban studies perspective', *Journal of Urban Affairs*, 46(6): 1176–1195. https://doi.org/10.1080/07352166.2023.2168552.

McKinney, W. (2010) 'Data structures for statistical computing in Python', *Proceedings of the 9th Python in Science Conference*, 445: 51–56. https://doi.org/10.25080/Majora-92bf1922-00a

Mermet, A.C. (2022) 'Can gentrification theory learn from Airbnb? Airbnbfication and the asset economy in Reykjavík', *Environment and Planning A: Economy and Space*, 54(6): 1147–1164. https://doi.org/10.1177/0308518X221094616.

Navarrete, D., Whitney, R. and Krstikj, A. (2024) 'Gentrificación transnacional y nómadas digitales en la zona central de la Ciudad de México', *EURE*, 51(152): 1–23. https://doi.org/10.7764/EURE.51.152.10.

Navarrete Escobedo, D. (2020) 'Foreigners as gentrifiers and tourists in a Mexican historic district', *Urban Studies*, 57(15): 3151–3168. https://doi.org/10.1177/0042098019896532.

Nieuwland, S. and van Melik, R. (2020) 'Regulating Airbnb: how cities deal with perceived negative externalities of short-term rentals', *Current Issues in Tourism*, 23(7): 811–825. https://doi.org/10.1080/13683500.2018.1504899.

Olmedo-Neri, R.A. (2020) 'La gentrificación turística de Airbnb: análisis socioespacial de dos monumentos en la Ciudad de México', *Persona y Sociedad*, 34(1): 45–70. https://doi.org/10.53689/pys.v34i1.305.

Olmedo-Neri, R.A. (2024) 'Nuevos residentes, nuevos paladares: transformaciones espaciales y comerciales en Ciudad de México', *Íconos, Revista de Ciencias Sociales*, 80: 177–198. https://doi.org/10.17141/iconos.80.2024.5978.

Oskam, J. and Boswijk, A. (2016) 'Airbnb: the future of networked hospitality businesses', *Journal of Tourism Futures*, 2(1): 22–42. https://doi.org/10.1108/JTF-11-2015-0048.

Quattrone, G., Proserpio, D., Quercia, D., Capra, L. and Musolesi, M. (2016) 'Who benefits from the sharing economy of Airbnb?', *Proceedings of the 25th International Conference on World Wide Web, Republic and Canton of Geneva: International World Wide Web Conferences Steering Committee*, pp. 1385–1394. https://doi.org/10.1145/2872427.2874815.

Rabiei-Dastjerdi, H., McArdle, G. and Hynes, W. (2022) 'Which came first, the gentrification or the Airbnb? Identifying spatial patterns of neighbourhood change using Airbnb data', *Habitat International*, 125: 102582. https://doi.org/10.1016/j.habitatint.2022.102582.

Ribaudo, G. and Figini, P. (2017) 'The puzzle of tourism demand at destinations hosting UNESCO World Heritage Sites: an analysis of tourism flows for Italy', *Journal of Travel Research*, 56(4): 521–542. https://doi.org/10.1177/0047287516643413.

Rubino, I., Coscia, C. and Curto, R. (2020) 'Identifying spatial relationships between built heritage resources and short-term rentals before the Covid-19 pandemic: exploratory perspectives on sustainability issues', *Sustainability*, 12(11): 4533. https://doi.org/10.3390/su12114533.

Sequera, J. and Nofre, J. (2018) 'Shaken, not stirred: new debates on touristification and the limits of gentrification', *City*, 22(5–6): 843–855. https://doi.org/10.1080/13604813.2018.1548819.

Sigler, T. and Wachsmuth, D. (2016) 'Transnational gentrification: globalisation and neighbourhood change in Panama's Casco Antiguo', *Urban Studies*, 53(4): 705–722. https://doi.org/10.1177/0042098014568070.

Sun, S., Wang, X. and Hu, M. (2022) 'Spatial distribution of Airbnb and its influencing factors: a case study of Suzhou, China', *Applied Geography*, 139: 102641. https://doi.org/10.1016/j.apgeog.2022.102641.

Tinoco-Guerrero, N.S. and Gómez, M. (2019) 'Heritage tourism and economic growth of the twenty most visited nations: a panel data analysis, 2006–2017', *Journal of Tourism and Heritage Research*, 2(3): 120–135. http://jthr.es/index.php/journal/article/view/68.

Wachsmuth, D. and Weisler, A. (2018) 'Airbnb and the rent gap: gentrification through the sharing economy', *Environment and Planning A*, *Economy and Space,* 50(6): 1147–1170. https://doi.org/10.1177/0308518X18778038.

Wang, M., Yang, J., Hsu, W.-L., Zhang, C. and Liu, H.-L. (2021) 'Service facilities in heritage tourism: identification and planning based on space syntax', *Information*, 12(12): 504. https://doi.org/10.3390/info12120504.

Xie, K., Heo, C.Y. and Mao, Z.E. (2021) 'Do professional hosts matter? Evidence from multi-listing and full-time hosts in Airbnb', *Journal of Hospitality and Tourism Management*, 47: 413–421. https://doi.org/10.1016/j.jhtm.2021.04.016.

Yang, Y., Xue, L. and Jones, T.E. (2019) 'Tourism-enhancing effect of World Heritage Sites: panacea or placebo? A meta-analysis', *Annals of Tourism Research*, 75: 29–41. https://doi.org/10.1016/j.annals.2018.12.007.

Zamorano Villarreal, C.C. (2019) 'Segurización, gentrificación, y Airbnb: ¿nueva fase de la renovación urbana en la Ciudad de México?', *Nueva Antropología*, 32(91): 26–46. https://revistas.inah.gob.mx/index.php/nuevaantropologia/article/view/15999.

Zervas, G., Proserpio, D. and Byers, J.W. (2017) 'The rise of the sharing economy: estimating the impact of Airbnb on the hotel industry', *Journal of Marketing Research*, 54(5): 687–705. https://doi.org/10.1509/jmr.15.0204.